Science Grade 8 Scope & Sequence

Days	Unit	Standard(s)/Outcome(s)	Essential/Guiding Questions
20	Building a Manmade Mountain • Climate and Natural Fluctuations • Latitude • Elevation • Rain Shadow Effect • Proximity of Large Bodies of Water	MS-ESS2-4 MS-ESS2-6 MS-ETS1-3	*Could a manmade structure change the climate?*
20	Greenland is Melting • Heat Transfer • Coriolis Effect • Global Winds • Ocean Currents • Albedo • Global Climate Change/Human Population • Greenhouse Gases/Ocean Acidification • Human Impact on Earth	MS-ESS2-4 MS-ESS2-6 MS-ESS3-3 MS-ESS3-5 MS-ETS1-1 MS-ETS1-4	*Why is Greenland melting?*
0	Severe Weather • Air Pressure • Local Winds • Water Cycle	MS-ESS2-4 MS-ESS2-5 MS-ESS2-6 MS-ESS3-2	*Why do we see severe weather events only in certain areas?*

	• Air Masses • Fronts • Storms • Severe Weather Patterns		
20	The Glossopteris Fossils • Fossils • Relative Age • Radioactive Dating • Time Scale • Evidence in Geological Events • Continental Drift • Seafloor Spreading	MS-ESS1-4 MS-ESS2-3	*What explains why the same fossils were found on different continents?*
20	The Yellowstone Supervolcano • Seafloor Spreading • Earth's Interior Processes • Plate Tectonics • Earthquakes • Volcanoes • Faults, Folds and Fracture Zones	MS-ESS2-2 MS-ESS3-2 MS-ETS1-2 MS-ETS1-3	*Why could the Yellowstone supervolcano be huge?*
15	Erosion All Around Us • Agents of Weathering • Agents of Erosion • Stream Erosion • Coastal Erosion	MS-ESS2-1 MS-ESS2-2 MS-ETS1-1 MS-ETS1-2	*How do weathering, erosion, and deposition change Earth's landscape and the landscapes of an area?*
10	Alternative Fuel Sources for Transportation • Natural Resources (renewable and non- renewable)	MS-ESS3-1 MS-ESS3-4 MS-ETS1-1	*What will be the fuel of the future?*

	• Distribution of Resources		
15	Living Outside Earth • Solar System Formation • Gravity and Orbital Motion • Galaxies and the Universe • Seasons	MS-ESS1-2 MS-ESS1-3	*How could we set up a colony outside of Earth?*
10	Eclipse 2024 • Earth - Sun - Moon System • Moon Phases • Eclipses	MS-ESS1-1 MS-ESS1-2 MS-ESS1-3	*Why is there going to be a solar eclipse in 2024 and how can we predict where you can go to see it?*